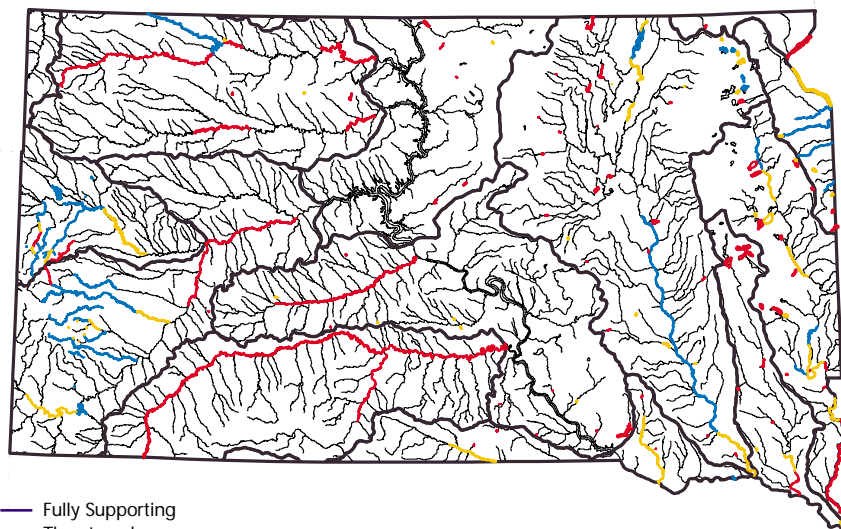


# South Dakota



— Fully Supporting  
 — Threatened  
 — Partially Supporting  
 — Not Supporting  
 — Not Assessed  
 — Basin Boundaries  
 (USGS 6-Digit Hydrologic Unit)

This map depicts aquatic life use support status.

For a copy of the South Dakota 1998 305(b) report, contact:

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## Surface Water Quality

Thirty-six percent of South Dakota's assessed rivers and streams fully support aquatic life uses and 37% of the assessed rivers also support swimming. The most common pollutants impacting South Dakota streams are suspended solids due to water erosion from croplands, gully erosion from rangelands, streambank erosion, and other natural forms of erosion.

Other impacts to streams were due to elevated total dissolved solids, low dissolved oxygen, elevated pH, and water temperature. Sixteen percent of South Dakota's assessed lake acres fully support aquatic life uses and 99% of the

assessed lake acres fully support swimming. The most common pollutants are nutrients and siltation from agricultural runoff and other nonpoint sources that produce dense algal blooms in many of the state's lakes.

The high water conditions that prevailed in South Dakota for most of this reporting period and last greatly increased watershed erosion and sedimentation in lakes and streams. Suspended solids criteria were severely violated in many rivers and streams, and there was an increase in the incidence of fecal coliform bacteria in swimming areas at lakes. However, water quality improved in some lakes that experienced low water levels during the late 1980s, and high flows diluted bacteria in some rivers and streams.

South Dakota did not report on the condition of wetlands.

## Ground Water Quality

More than three-quarters of South Dakota's population uses ground water for domestic needs. General ground water quality is good, with only a few aquifers having naturally occurring contamination. Deeper aquifers generally have poorer water quality than shallow aquifers but are also generally less susceptible to pollution. The most significant ground water quality problems in South Dakota are human-induced ground water degradation from petroleum, nitrate, and other chemicals through accidental releases and product mishandling, poor management practices, improper locating of pollutant-producing facilities, and contamination of shallow wells due to poor construction or location adjacent to pollutant sources.

## Programs to Restore Water Quality

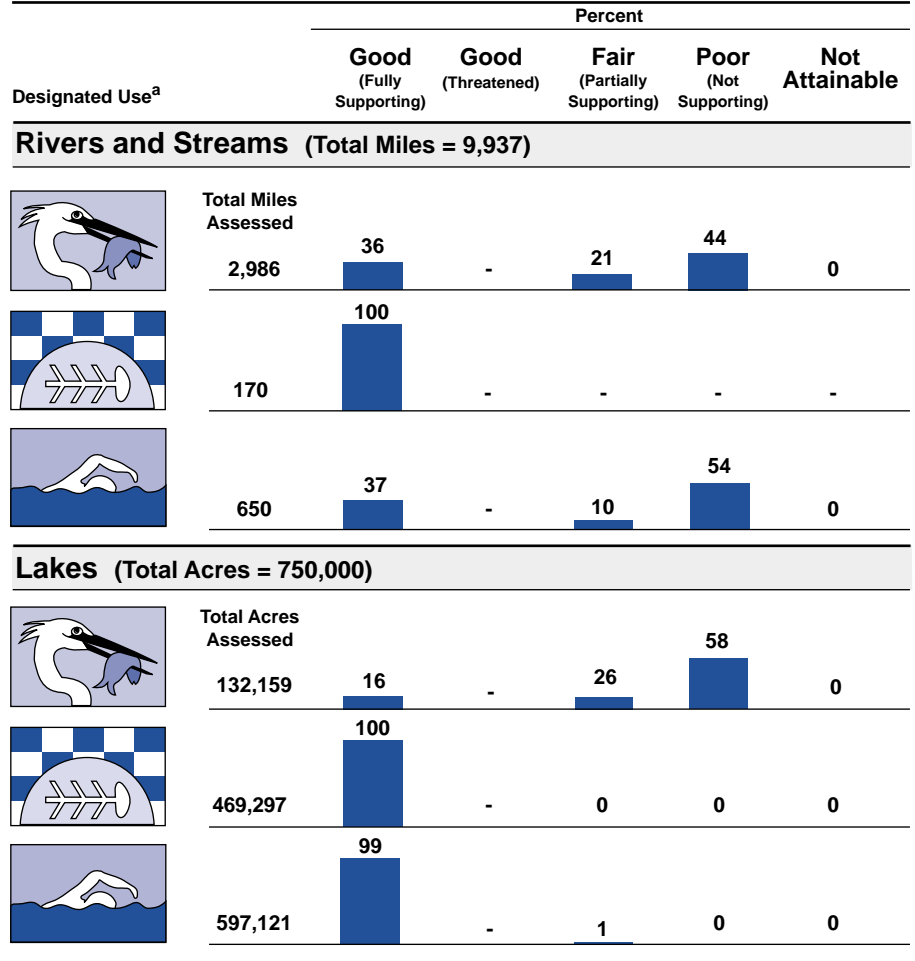
South Dakota regulates point sources through the National Pollutant Discharge Elimination System. As part of the state's point source program, South Dakota regulates concentrated animal feeding operations (CAFOs). The state offers two general permits, one for concentrated swine operations and one for other CAFOs.

South Dakota relies primarily on voluntary implementation of best management practices to control nonpoint source pollution. However, the state acknowledges that the technical and financial assistance currently available is not sufficient to solve all the NPS problems in the state. Other solutions may be explored, including enforcement to increase compliance with state and federal requirements.

## Programs to Assess Water Quality

South Dakota conducts ambient water quality monitoring at established stations, special intensive surveys, intensive fish surveys, TMDL wasteload allocation surveys, and individual nonpoint source projects. Biological sampling is also conducted for special studies and diagnostic/feasibility studies. The U.S. Geological Survey, Corps of Engineers, and U.S. Forest Service also conduct routine monitoring throughout the state. Water samples are analyzed for chemical, physical, biological, and bacteriological parameters.

## Individual Use Support in South Dakota



- Not reported in a quantifiable format or unknown.

<sup>a</sup> A subset of South Dakota's designated uses appear in this figure. Refer to the state's 305(b) report for a full description of the state's uses.

Note: Figures may not add to 100% due to rounding.